



Commission for
Communications Regulation

National Broadband Plan

Response to Call for Input

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Reference: ComReg 15/57

Version: Final

Date: 18/06/2015

An Coimisiún um Rialáil Cumarsáide

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Additional Information

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Approval

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1 Introduction

- 1 The Government's National Broadband Plan was published by the Department of Communications Energy and Natural Resources (**DCENR**) on 30 August 2012¹ (the **NBP**). Further details were announced by the Minister for the DCENR (the **Minister**) on 25 April 2014 which stated that the focus of the NBP is a "*long term, future proofed infrastructure build with fibre as a key component underpinning whatever technology delivers the service (fixed or wireless)*"².
- 2 As part of the NBP, the DCENR is co-ordinating State-led intervention to procure the delivery of high speed broadband in areas where service providers are unlikely to provide such services commercially.
- 3 The implementation of the NBP is the responsibility of the Minister and the DCENR.
- 4 ComReg is the statutory body responsible for the regulation of the electronic communications sector (telecommunications, radio communications and broadcasting transmission) in Ireland. It is the national regulatory authority for these sectors in accordance with EU law which is subsequently transposed into Irish legislation. More information in relation to the ComReg can be accessed at www.comreg.ie.
- 5 For clarity, ComReg has no decision-making role in the design of the NBP (including decisions on the mapping or tendering process) or the award of any contracts under the NBP. As such, these NBP decision-making matters are outside of ComReg's remit. The decision-making with respect to these matters is the responsibility of the DCENR and the Minister.
- 6 However ComReg does have a role in the context of the European Commission's State Aid Guidelines³. In this context there has been regular contact between DCENR and ComReg and this dialogue is ongoing.

¹ <http://www.dcenr.gov.ie/NR/rdonlyres/1EA7B477-741B-4B74-A08E-6350135C32D2/0/NBP.pdf>

² <http://www.dcenr.gov.ie/Press+Releases/2014/Major+fibre+build-out+to+rural+Ireland+will+be+cornerstone+of+Government+strategy.htm>

³ *EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*, OJ C25, 26.01.2013, p.1

- 7 On 4 December 2014, ComReg published its Call for Input – ComReg Document No 14/126 “*National Broadband Plan – Call for Input on Regulatory Implications*” (the **Call for Input**).⁴ In publishing the Call for Input ComReg is mindful of its objectives as set out in Regulation 16 of the Framework Regulations⁵ and in particular Regulation 16(2) which states that:

“In pursuit of its objectives under paragraph (1) and under section 12 of the Act of 2002, the Regulator shall apply objective, transparent, non-discriminatory and proportionate regulatory principles by, among other things—

(a) promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods,

(b) ensuring that, in similar circumstances, there is no discrimination in the treatment of undertakings providing electronic communications networks and services,

(c) safeguarding competition to the benefit of consumers and promoting, where appropriate, infrastructure based competition,”

- 8 ComReg received twenty three submissions in response to the Call for Input. On 11 March 2015, ComReg published all submissions that it received in response to its Call for Input – ComReg Document No 14/126s.⁶
- 9 ComReg notes that certain issues raised by respondents concern matters which although, potentially of importance for ComReg’s role, are properly a matter for DCENR to decide. An example of this is ComReg’s involvement, if any, in post award governance of the NBP contract. While such matters have been discussed between DCENR and ComReg, we do not deal with them in detail in this paper as we understand they may be addressed in DCENR’s forthcoming consultation on its strategy for the NBP which is due for publication later this summer.

- 10 The remainder of this Response to Call for Input document is structured as follows:

10.1 In Chapter 2, ComReg addresses the issues raised by respondents.

10.2 In Chapter 3, ComReg considers the next steps envisaged.

⁴ <http://www.comreg.ie/fileupload/publications/ComReg14126.pdf>

⁵ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011).

⁶ <http://www.comreg.ie/fileupload/publications/ComReg14126s.pdf>

2 Response to Call for Input

11 ComReg has divided the requests for clarification raised by respondents to the Call For Input into five main categories:

- Significant Market Power (**SMP**) and other regulatory issues
- Procedural and Governance issues
- Potential impact of NBP on provision of universal service
- Transition from copper to fibre access networks
- Radio spectrum related issues

12 In this chapter, ComReg will address in sections 2.1 to 2.5, where possible, the main issues raised by respondents for each of the five categories set out in paragraph 11.

2.1 SMP and Other Regulatory Issues

2.1.1 SMP

13 A number of respondents sought clarification regarding the status/interaction of regulation with respect to the potential NBP provider(s). In particular, several respondents queried whether a winning bidder would be regarded as having SMP and, if so designated, what remedies would apply to the successful NBP tenderer(s).

14 In addition, a number of respondents sought views from ComReg as to what it considers substitutable services in the NBP intervention area.

ComReg's response

15 We envisage that the current process underpinning the assessment of SMP in the Irish market will remain in place — subject to the normal evolution of the relevant EU legislation. We do not believe that it is possible to speculate as to the outcome of future market reviews either as regards the geographic aspects of market definition or as regards what products are to be regarded as potential substitutes until more is known about the scope and impact of the NBP. In any event, future proposals by ComReg must, by law, be fully consulted upon and notified to the European Commission. Accordingly it is impossible for ComReg to provide definitive guidance on these matters in advance of this happening.

- 16 However, ComReg acknowledges the possibility that a winning NBP bidder or bidders may be found at some stage to have SMP, whether regionally or nationally. Such a finding could only be made in line with the procedures referred to above. Any remedies imposed on an undertaking designated with SMP would be with reference to any competition problems identified as part of a market review process.
- 17 We refer interested parties to the relevant European Commission Recommendation⁷, Guidelines⁸, Access Regulations⁹ and Framework Regulations¹⁰ as well as previous ComReg publications such as those referred to in section 2.1.2 of this document.
- 18 In respect of the NBP tender and whether certain technologies are appropriate for delivery of the NBP this is a matter for the DCENR. Specifically, the DCENR has stated that the NBP will “*facilitate broadband download speeds of 70Mbps with a minimum of 40Mbps generally available and 30Mbps available in harder to reach rural areas*”¹¹. We do not opine on the appropriateness of the product set to be tendered for in the NBP. It is the DCENR’s responsibility to identify whether a particular technology is an appropriate solution to meet its policy objectives within the NBP intervention area.

2.1.2 Pricing model related queries

- 19 A number of respondents raised questions concerning the current regulatory pricing regime. One respondent questioned what impact ComReg envisages the NBP to have on existing regulations and whether ComReg plans to revisit any obligations and decisions currently in force which may be impacted. Some respondents gave the example of leased lines (that support the NBP), and queried whether such leased lines would be subject to the same regulation as other leased lines or whether a separate regulatory regime would be put in place.

⁷ European Commission – Commission Recommendation of 9.10.2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (the ‘2014 Recommendation’) available at <https://ec.europa.eu/digital-agenda/en/news/commission-recommendation-relevant-product-and-service-markets-within-electronic-communications>

⁸ European Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic networks and services, OJ 2002 C 165/3 (the ‘**SMP Guidelines**’)

⁹ European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011) (the ‘**Access Regulations**’). The SMP Guidelines also state at paragraph 17 that “NRAs must impose at least one regulatory obligation on an undertaking that has been designated as having SMP”.

¹⁰ European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011) (the ‘**Framework Regulations**’). The Framework Regulations transpose the Framework Directive.

¹¹ <http://www.dcenr.gov.ie/Communications/National+Broadband+Plan/>

- 20 Another respondent sought clarification regarding the potential implications where the NBP subsidy is provided for infrastructure that may also be shared or used by an undertaking with SMP to support regulated services. The respondent queried how this would be taken into account in ComReg's calculations for cost-oriented price controls and / or other unintended advantages as a result of state activity.

ComReg's response

- 21 ComReg has commenced a number of market reviews which may be relevant in this context. These are :
- 21.1 The market for wholesale local access provided at a fixed location (Market 3(a) as described in the European Commission's recommended list of markets susceptible to regulation¹²)
- 21.2 The market for wholesale central access provided at a fixed location for mass-market products (Market 3(b) in the Recommendation)
- 21.3 The market for wholesale high-quality access provided at a fixed location (Market 4 in the Recommendation)
- 22 In these reviews we will take account of projected developments in the NBP intervention area. It is not possible to provide guidance on the likely outcome of these reviews at this time. (See also paragraphs 15 and 16).
- 23 The appropriateness of the product set to be tendered for in the NBP is a matter for DCENR. We do not know yet whether leased line type services will be offered over any new or enhanced networks constructed as part of the NBP. ComReg understands that this will be clarified by DCENR in its forthcoming consultation. The regulatory status of such services would be assessed as part of ComReg's ongoing market review programme.
- 24 As regards issues of State subsidy of the new enhanced infrastructure, ComReg understands that the European Commission's State Aid Guidelines¹³ (**State Aid Guidelines**) provide guidance as to how the risk of market distortion in this way is to be minimised. ComReg continues to liaise with DCENR in this regard.

¹² European Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (OJ L 295, 11.10.2014, p. 79) (the **Recommendation**).

¹³ *EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*, OJ C25, 26.01.2013, p.1: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:025:0001:0026:EN:PDF>

- 25 Specifically, where a winning bidder(s) for the NBP is also designated with SMP, the implications for the treatment of any government subsidy and cost allocations generally would be considered as part of ComReg's ongoing review of relevant SMP obligations: in particular any obligations relating to price control, accounting separation and cost accounting systems.
- 26 Insofar as it is necessary to monitor the activities and economic performance of the NBP tender winner(s) and to determine, for example, if any claw-back of the government subsidy may be required, it is a matter for the DCENR to determine what models and/or obligations are required to ensure that the NBP provider's (or NBP providers') activities are conducted in a sufficiently non-discriminatory and transparent manner (see also section on transparency in Section 2.2). It is in the DCENR's remit to determine what type of cost-based models will be used for NBP purposes.

2.1.3 NBP tender related queries

- 27 ComReg received several questions around what measures will be taken to ensure fairness of the NBP bidding process.
- 28 A number of respondents raised queries around how an SMP undertaking would be required to construct a tender and whether it would use the same wholesale prices as other bidders. In particular, one respondent queried whether an SMP operator bidding for the NBP would be obliged to construct its proposed NBP tender offering using the same wholesale products provided by its upstream arm and at the same wholesale prices as it offers on a non-discriminatory basis to other undertakings submitting tenders. In addition, one respondent queried whether the SMP undertaking will be required to publish a reference offer for all relevant wholesale products, in particular passive network elements, provided by its upstream arm which it intends to use in constructing its proposed NBP tender offering.
- 29 One respondent queried whether ComReg proposes to apply non-discrimination obligations in the event that the current SMP undertaking is successful in the NBP tender process. In particular, the respondent queried whether ComReg would do so where as part of the current SMP undertaking's tender it has offered more advantageous terms or prices than are currently mandated under regulation. Finally, the respondent queried whether ComReg would apply non-discrimination obligations in the case where a non-SMP undertaking is successful in the NBP tender process and offers a superior suite of Service Level Agreements (**SLAs**) to what is available to other authorised operators under the current SMP regime.

ComReg's response

- 30 The current SMP operator (Eircom) currently has various regulatory obligations imposed on it in the markets for wholesale physical network infrastructure access¹⁴, wholesale broadband access¹⁵ and leased lines¹⁶, including obligations relating to price control and non-discrimination. These obligations remain in force. Any future change would be subject to the normal procedural requirements referenced above in chapter 2.1.1. Wholesale pricing requirements as part of the NBP, whether on Eircom or other potential bidders, are a matter for the DCENR. Clearly it is highly desirable that there will be no incompatibility between SMP obligations and NBP requirements and DCENR and ComReg are in ongoing dialogue in this regard.
- 31 In relation to whether the current SMP operator (should it decide to bid for the NBP) or any other bidder, would be required to publish a reference offer for NBP purposes for all relevant wholesale products, in particular passive elements, provided by its upstream arm which it intends to use in constructing its proposed NBP tender offering, ComReg is of the view that that is a matter for the DCENR to determine. Eircom as an SMP operator already has an obligation to publish a reference offer under current regulation.
- 32 As previously noted, the implementation of the NBP, including the bidding process, is the responsibility of the DCENR and the Minister. Detailed requirements for NBP tenders (such as SLAs, performance targets etc.) will, we understand, be addressed by in the DCENR in its forthcoming consultation. Where appropriate, ComReg continues to provide technical advice and assistance to DCENR.

2.2 Procedural and Governance Issues

- 33 A number of respondents raised questions concerning ComReg's role in general in the NBP process and in particular pursuant to the State Aid Guidelines. Several respondents raised questions regarding ComReg's role (if any) in managing and overseeing the implementation of the NBP. Similarly, some respondents queried what ComReg's role would be (if any) in relation to resolving disputes related to the NBP (e.g., interconnection requests) or SLAs.
- 34 One respondent raised the question of what requirements (if any) ComReg would seek to impose on Retail Service Providers (**RSPs**) under the NBP.

¹⁴ ComReg Decision D05/10 ComReg Document No. 10/39 entitled "Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4)" dated 20 May 2010, as amended

¹⁵ ComReg Decision D06/11 ComReg Document No. 11/49 entitled "Response to Consultation and Decision; Market Review: Wholesale Broadband Access" dated 8 July 2011, as amended

¹⁶ ComReg Decision D06/08 ComReg Document No. 08/103 entitled "Market Analysis – Leased Lines Market Review Response to Consultation on draft Decision Instrument Final Decision Notice and Decision Instrument" dated 22 December 2008, as amended

- 35 One respondent queried how ComReg will treat confidential information that other parties reasonably have a right to know.
- 36 One respondent questioned if ComReg proposes, in providing input and advice to the DCENR on any aspect of the NBP, to keep industry informed of those communications in accordance with ComReg's transparency obligation. A number of respondents also raised questions around the extent to which ComReg will continue to engage with industry in relation to the NBP.

ComReg's response

- 37 The design of post-award governance has been the subject of discussion between DCENR and ComReg. Proposals in this regard will be published in DCENR's forthcoming consultation. ComReg is of the view that it will be important to ensure that regulatory rules and NBP governance structures are not mutually incompatible. These matters are being discussed between DCENR and ComReg.
- 38 Any requirement for an Equivalence of Inputs standard to form part of the NBP is a matter ultimately for DCENR having regard to State Aid Guidelines
- 39 ComReg will continue to engage with industry players in the usual manner in relation to issues relevant to its statutory functions. Industry players are referred to DCENR in respect of NBP related matters.
- 40 ComReg is providing advice of a technical nature to DCENR where it has relevant skills. We do not plan to disclose the details of these discussions except where required by law. The outcome of such discussions will eventually be manifested in DCENR's planned public consultation.
- 41 ComReg will treat operators' confidential information in line with its published guidelines¹⁷.

2.3 Potential impact of NBP on provision of universal service

- 42 Nine of the respondents had specific questions on the provision of telephony services pursuant to the universal service obligation (**USO**) in the context of the NBP. Broadly, these respondents sought clarity on:
- ComReg's plan to review the future scope and implementation of the USO;
 - Potential universal service requirements for the NBP contract winner(s);
 - Consumer protection and USO performance monitoring;

¹⁷ ComReg Document No. 05/24 entitled "Response to Consultation – Guidelines on the treatment of confidential information" dated 22 March 2005.

- Universal service costing and financing in the context of the NBP;
- Application of the State Aid Guidelines.

2.3.1 ComReg's strategic review of the future scope and implementation of USO

- 43 Two of the respondents sought clarity around the planned strategic review of the USO by ComReg in 2015 and the possible requirements of a future USO.
- 44 One respondent asks if ComReg's strategic review of the USO will be completed in time, prior to the commencement of the NBP tendering process, with a view to establishing certainty on the longer-term implementation of Ireland's USO. This respondent also asks whether ComReg's strategic review will address the definition of USO, notably, the requirement to meet all reasonable requests for voice telephony service at a fixed location and the USO definition of functional internet access. Another respondent asks whether it is reasonable to assume that no change will be made to the existing USO until after the NBP is completed.

ComReg's response

Access at a Fixed Location (AFL) Universal Service Obligation

- The provisions of the Universal Service Regulations (**USR**) aim to ensure the provision of the basic right of end-users to telephony access at a fixed location (**AFL**) – essentially that basic telephone services are available to all end users at a fixed location at an appropriate level of quality and at an affordable price.¹⁸ ComReg is required to ensure that users *inter alia* have the ability to connect to a public communications network at a fixed location and are provided with associated basic telephony services.
- 45 Eircom is currently designated as the universal service provider (**USP**) for the purposes of providing AFL under USO (**AFL USO**) for an 18 month period from July 2014 until 31 December 2015¹⁹. As such, Eircom has various obligations relating to the provision of an AFL USO:
- To provide AFL capable of local, national and international telephone calls, facsimile communications and data communications permitting Functional Internet Access (**FIA**) and associated service;

¹⁸ The scope of universal service is defined by the Directive 2002/22/EC of the European Parliament, as amended by Directive 2009/136/EC (**the Amending Directive**). The Amending Directive was transposed into Irish Law on 1 July 2011 by the Universal Service Regulations 2011.

¹⁹ ComReg Decision D10/14: <http://www.comreg.ie/fileupload/publications/ComReg1471.pdf>

- To meet reasonable requests for access and FIA (ComReg Decision D09/05);²⁰
 - Threshold of expenditure at €7,000 or greater than €7,000 if the applicant agrees to pay the additional charge; and
 - Minimum data rate of 28.8 kbps.
- To meet minimum Quality of Service (**QoS**) performance targets (ComReg Decision D02/08);²¹
- To provide measures in respect of control of expenditure²²; and
- To provide geographically average prices (**GAP**) for the above.

ComReg's planned review of the Access at a Fixed Location USO addressing the next 3 to 5 years.

- 46 The existing AFL USO will remain in force until 31 December 2015. Absent any AFL USO, there may be a risk that the market would not deliver basic AFL services (as required by the USR) to areas of the State (such as rural or sparsely populated areas) and / or to less economic customers distributed nationally.
- 47 During the next 5 years, the Irish electronic communications market is expected to significantly change, as technology and competition develops, and as consumer needs evolve. However, ComReg is required, by the USR to ensure that basic telephony at a fixed location is available to all end users at an affordable price and appropriate quality, as necessary.
- 48 In this context, it is important to note that apart from the AFL USO, there is currently no other mechanism, programme or scheme in place to ensure that the basic telephony at a fixed location, set out in the USR, is provided to everyone that requires it and cannot obtain it under normal market conditions. Therefore, ComReg is of the view that the AFL USO may continue to play an important role where necessary.
- 49 In advance of the expiry of the current AFL USO designation, ComReg is carrying out a forward looking review of the future of the AFL element of the USO. This will consider forward looking requirements for the AFL USO, and a roadmap for its evolution. This review will consider possible and likely developments in the next 3 to 5 years including intensification of competition, deployment of NGA /FTTH networks, NBP developments, demand changes in respect of fixed voice subscriptions, mobile voice and managed VOIP or Over The Top (**OTT**) services.

²⁰ ComReg (2005), 05/70, http://www.comreg.ie/_fileupload/publications/ComReg0570.pdf

²¹ ComReg (2008), 08/37, http://www.comreg.ie/_fileupload/publications/ComReg0837.pdf

²² See ComReg's preliminary consultation on selective call barring at:
http://www.comreg.ie/_fileupload/publications/ComReg1531.pdf

- 50 In addition, ComReg's forward looking review of the AFL USO will, as appropriate, consider the potential different circumstances that may emerge in various geographic locations *inter alia* deployment of NGA, FTTH networks, NBP developments, and consumer demand changes. Such developments may impact the requirement or not for an AFL USO in certain areas, though the need for a USO may continue to arise nationally including in relation to affordability of services.
- 51 In the context of NBP, ComReg's review will consider to what extent its assessment of the evolution of AFL over 3 to 5 years should reflect the ongoing NBP roll out which is planned to commence during this period. The outcome of the NBP procurement process and thus its exact impact and timing of that impact on any AFL USO, will not be known definitively before ComReg's upcoming review consultation commences. However, ComReg will consider currently available information and further information as it becomes available and ComReg will liaise with the DCENR to ensure relevant information regarding the NBP which impacts on the AFL USO can be considered by ComReg.
- 52 ComReg will also need to consider the impact on AFL USO after the NBP roll out has been fully completed. This is discussed in section 2.3.2 below.
- 53 The European Commission is legally obliged to periodically review the scope of universal service (**US**)²³. The last European Commission Communication reporting on the scope of US was published in November 2011 and concluded that, at that point in time, there was no need to change the scope of US at EU level. ComReg notes that as part of the Digital Single Market Review²⁴, the European Commission is expected to deliberate on the role of the US *inter alia* on whether or not, and how, to change the scope of the US at EU level. The outcome of the European Commission's review and amendment, as relevant, of the legislative framework in the coming years in this regard will not be known in the immediate future. Consequently, ComReg will consider further information as it becomes available and with respect to a long-term implementation of Ireland's USO if so decided.
- 54 ComReg's upcoming review of AFL USO will be carried out in two parts. ComReg plans to issue a consultation paper in July 2015. This will publically consult, *inter alia*, on the continued need, if any, for an AFL USO and the high level consideration of the associated components of QoS, GAP, reasonable access threshold (**RAT**) and FIA respectively in the next three to five years.

²³ In accordance with Article 15 of the Universal Service Directive

²⁴ http://ec.europa.eu/priorities/digital-single-market/index_en.htm

- 55 If the outcome of this consultation is a preliminary view that a USO relating to AFL is necessary for the next 3 to 5 years, it is envisaged that ComReg would issue further consultation paper(s) during quarter three of 2015. This further consultation phase, as relevant, would assess in detail what specific proposed requirements for AFL might be necessary. This could include QoS standards, Affordability measures including GAP), the specification of a reasonable access request (**RAR**) and the specification of FIA.
- 56 The overall approach and options for a possible designation of an undertaking(s) for AFL USO would also be considered.
- 57 Following these consultations, it is envisaged that a final decision or decisions would be issued before the end of 2015 in respect of the AFL USO for the period of 3 to 5 years commencing 2016, as necessary.
- 58 ComReg will seek the consent of the Minister for Communications, Energy and Natural Resources as relevant.

2.3.2 Potential universal service requirements for NBP contract winner(s)

- 59 Several of the respondents raised queries about potential future interrelations between USO provisions and the NBP instrument.
- 60 One respondent asks what process will be used by ComReg to review the existing USO after the NBP takes place. A number of other respondents ask about possible future requirements for USO; what new regime for USO will apply for NBP contract winners and if there will be any differences in how the USO will be applied if the winner of the NBP contract is not Eircom; would ComReg consider the intervention area separately for the purposes of USO. Another respondent asks whether the current regime for USO voice will continue to apply when the NBP is put in place or whether a new USO will be made by ComReg covering voice and data. One respondent believes that mechanisms will be put in place under the NBP which will ensure retail prices will be available on a ubiquitous basis. As such, this respondent is of the view that no further affordability measures will be required under USO and ComReg should confirm the same.
- 61 Finally, one respondent queried whether ComReg would have a role in bringing the USP's previous performance to the attention of the DCENR in order to ensure that the DCENR has all the information available to assess the creditability of the USP's future claims. This respondent then questioned if ComReg has a preliminary view on whether more demanding performance metrics should be required of the successful NBP tenderer than is currently monitored under the existing USP obligations.

ComReg's response

- 62 Section 2.3.1 above aims to provide clarity on the processes and issues likely to be covered by ComReg's planned consultations in relation to the potential scope and implementation of a USO in the next 3 to 5 years. Any long-term implementation of a USO in the context of a fully completed NBP infrastructure (possibly post 2020) could not be considered in any great detail during ComReg's forthcoming USO consultation process, but will be considered as the NBP rollout progresses.
- 63 Notwithstanding this, the remainder of this section outlines the principles that may be relevant for ComReg to consider where a future consideration of AFL USO is appropriate in the context of a fully completed NBP infrastructure.
- 64 It is not possible to be definitive yet on the exact impact of the NBP on the AFL USO requirements or the type of issues being raised by respondents. We are some time away from seeing what the full impact of a completed NBP infrastructure would actually have with regard to the long-term implementation of a USO, if any. However, with a view to ensuring maximum transparency for stakeholders, ComReg considers it valuable to outline possible principles we could use when assessing concrete NBP developments and their associated impact on USO in the operational phase of the NBP.
- 65 National legislation requires that ComReg must ensure that citizens and businesses have a right to access affordable, high quality basic electronic communications services at all fixed locations in Ireland. Currently, this includes the ability to connect to a public communications network at a fixed location as well as services over that connection, at present principally voice services and FIA.²⁵ In principle, broadband access rights could be expanded through the USO, however ComReg like many other NRAs across Europe has not considered it appropriate to include broadband in the USO so far, particularly in light of the NBP.
- 66 ComReg's understanding at present is that DCENR will tender for a high capacity broadband network which will aim to ensure that all end users have access to a high speed broadband connection in the intervention area. As other areas outside the intervention area are planned to be addressed by other commercial means, which suggests that this intervention will, in theory, ensure that all users will have access to high speed broadband access and services at speeds of at least 30 Mbps or faster, post NBP rollout.

²⁵ In accordance with Regulation 3 of the Universal Service Regulations.

- 67 The expected scenario post NBP rollout correlates with the AFL USO requirement in that in principle and technically all end users will have ability to connect to a public communications network at a fixed location.
- 68 In this context ComReg may set out a future view as to whether the long-term implementation of Ireland's AFL USO, if required, could be met in the relevant areas by this new NBP network, once fully completed. For example, the new network will likely be technically capable of providing access to a communications network capable of providing a voice service – most likely using Voice Over Internet Protocol (**VOIP**) technology.
- 69 In respect of the NBP intervention areas, a consideration is whether VOIP would be adequate for meeting USO requirements.²⁶ Another consideration is whether end users will be able to avail of voice services at an affordable price – especially those who have limited or no requirement for a broadband service. Before forming a view on these considerations, ComReg will need to understand precisely the nature and capabilities of the new network and the associated contractual conditions. These are matters for DCENR to decide and ComReg's position as regards USO in the long-term and post NBP would be formalised as appropriate when there is clarity on these matters.
- 70 However, in principle a managed VOIP service over a high speed quality network could satisfy the requirements of a voice AFL USO if provided at an affordable price.
- 71 Therefore, broadly, a number of potential options present themselves:
- **Option A: Market forces** – In the context of a fully completed NBP infrastructure and/or availability of other enhanced networks, possibly post 2020, ComReg may feel that market forces alone would be sufficient to ensure AFL basic services required by the USRs would be provided to everyone including a quality service at an affordable price. If this was the case it is possible that ComReg would no longer need to designate an undertaking to ensure AFL USO in whole / parts of the State.
 - **Option B: NBP intervention** – ComReg may be of the view that its objectives under the USRs (e.g., 'access to a communications network') could be effectively fulfilled by the NBP contract and no further intervention may be needed in those areas. In addition, the NBP contract may ultimately be adequate for meeting USO requirements in relation to providing an adequate voice service at an affordable price (managed VOIP may be

²⁶ For example, broadband access must be in place for managed VOIP to be pervasive and viable as a PSTN substitution. This issue is discussed in ComReg (2012), 'Retail Access to the Public Telephone Network at a Fixed Location for Residential and Non Residential Customers', Market Review, 12/117, October 26th.

equivalent to the PSTN voice services). However, this would likely be based on the assumption that the NBP infrastructure is fully completed; that the NBP contracted product set offered permits delivery of affordable USO and; that any new arrangements under the NBP would be such that the requirements of the USRs are capable of being fulfilled within the intervention area by the NBP provider(s) as well as RSPs as relevant. In these circumstances, a USO instrument may no longer be needed in the intervention area to ensure delivery of universal services (if so decided). Moreover, the non-intervention area could be assessed, and having regard to relevant developments a USO instrument may or may not be required for that area.

- **Option C: USO instrument** – If it were to be determined by ComReg post 2020 that a USO for services (e.g., voice AFL or, other to be defined service) would be required in the long-term future, yet this requirement of USO services would not be effectively fulfilled by the NBP contract (Option B), a designation of an undertaking may be needed to secure the delivery of basic telephony services under USO, primarily affordable voice in the intervention area. Again, the non-intervention area could be assessed, and having regard to relevant developments a USO instrument may or may not be required for that area.

72 ComReg may need to impose a USO to ensure consumer rights to AFL services in the long-term. In this respect, a number of potential options present themselves. In practice a USO may be imposed (if decided) either on the NBP contract winner in a particular area or some other operator capable of meeting certain criteria, possibly network reach, experience and ability to provide universal service. If there are multiple NBP lots it is possible that there may be more than one USP depending on the region. It is not possible to state precisely what the requirements of the USO would be by the time of the procurement process. It is possible that further guidance may be required as new information becomes available and NBP developments unfold. The USRs require ComReg to designate one, or more, undertakings to guarantee the provision of the universal services to ensure that the whole of the State is covered. Different operators (undertakings), or sets of operators, can be designated to provide different elements of universal service, and/or to cover different parts of the State. In principle, no undertaking should be excluded from being designated to provide all or part of the universal service, in all or part of the State. It may be open to ComReg in the future to impose the universal service obligation as either a wholesale or retail obligation, whichever is more appropriate.

- 73 Finally, subject to public consultation on DCENR's mapping exercise and strategy for intervention, an intervention area will be defined (i.e. the provision of a high capacity broadband network ensuring all end users have access to broadband connection would not be commercially provided in this area). ComReg's future assessment of the likelihood of an AFL USO outside the intervention area in the long-term and, any potential net costs arising should a USO be imposed, may have regard to representations and commitments made by operators during the NBP procurement process.
- 74 ComReg may issue guidance as to what any requirements on a new NBP network might be and how this might work in practice to ensure a long-term implementation of Ireland's USO if necessary. In accordance with current legislation, any subsequent changes to the USO, possibly because of any impact of the NBP on USO, would need to be consulted upon and under current rules ComReg would need to obtain the consent of the Government Minister with respect to the scope of the universal service and the designation of one, or more, undertaking(s) as relevant.
- 75 The nature of any performance targets to be mandated as part of the NBP contract is a matter for DCENR. ComReg will, separately, continue to evaluate the appropriateness of performance targets as part of the USO.

2.3.3 Consumer protection and USO performance monitoring

- 76 One respondent asks what penalties will apply to the USP in default of its USO and what compensation will be available to customers in default of those USOs.

ComReg's response

- 77 ComReg has powers under the USRs to monitor and enforce a USP's compliance with its obligations under the Regulations and to resolve any disputes between a designated USP and customers.

78 More specifically, ComReg Decision D10/14 formalised the USO in relation to voice access at a fixed location as well as continued performance targets. ComReg D02/08, published on 28 May 2008, set legally binding performance targets for Eircom to meet its obligations in respect of AFL. Arising from the current USO designation, Eircom and ComReg have established a performance improvement program (PIP 3) for the period 7 July 2014 to 31 December 2015. The PIP 3 framework set out targets (in respect of timescales for connection, fault repairs and fault rate occurrence) and penalties.²⁷ In general the process for addressing breaches in these obligations are set out in the USRs. ComReg is not aware that this process will change on foot of the NBP.

2.3.4 Universal service costing and financing in the context of NBP

- 79 A number of respondents raised queries about the potential impact of NBP on costing and financing of USO.
- 80 One respondent asks about any potential impacts on Eircom's claims for USO funding given the successful tenderer will be subsidised by the State to serve uneconomical areas of the country; whether this could potentially mean a reduction in the uneconomical costs of USO to Eircom (irrespective of who wins the NBP tender). Additionally, the same respondent queried whether ComReg's current methodological framework for assessing Eircom's claims for USO funding would allow ComReg to take any impacts of NBP into account. Finally, this respondent asks whether the winning bidder in the NBP tender would be required to contribute to a universal service fund if established and if there are any circumstance under which it might be exempt from such a requirement.
- 81 Another respondent believes that PSTN services will quickly migrate to the new high capability network. According to this respondent, utilisation of the existing PSTN network will collapse thereby creating a substantial USO cost that would become increasingly unsustainable and unreasonable. In this context, the respondent asks whether the USO will take into account the impending NBP in assessing the load on the PSTN and, in the view of this respondent, the expected collapse of revenues to support that network during the transition from what it terms the "*legacy network to a Broadband-centric network*"; Furthermore, the respondent asks what policy approach does ComReg envisage that would minimise the transition period and the USO costs that would have to be borne by industry and end user customers.

²⁷ ComReg (2014), 14/129, Appendix 3:
<http://www.comreg.ie/fileupload/publications/ComReg14129.pdf>

ComReg's response

- 82 The provision of universal service may result in the USP(s) providing designated services at a net cost. Arising from the USRs, the designated USP can submit a request for funding ("application") for a claimed net cost (including intangible benefits) of providing the USO. However, it is noted that only services within the scope of universal service can give rise to a USO net cost (if any). Eircom as the designated USP until 31 December 2015 has recently submitted applications for funding in respect of the provision of USO services separately for the periods 2010-2011, 2011-2012, 2012-2013 and 2013-2014. ComReg is now considering the application(s) it has received.²⁸ In Ireland, the USRs currently require that any such funding requirements must be met by industry. No universal service fund has been established in Ireland so far.
- 83 ComReg Decision D04/11²⁹ set the general principles and methodology in respect of assessing an application. Those principles and methodologies set out how the net cost of meeting the USO (if any) would be calculated including identification of intangible benefits and the criteria which would be used to determine if the burden (if any) is unfair. Any application must be submitted and addressed in accordance with ComReg Decision D04/11. It is envisaged that ComReg will assess on a case by case basis each application for funding already submitted by Eircom (or in the future by a USP) in respect of its consistency with the principles and methodologies prescribed by ComReg in D04/11. Accordingly, for each application, ComReg will verify if there is a positive net cost, determine whether or not any such net cost constitutes an unfair burden on the USP, and decide whether or not to establish a universal service fund. ComReg is not aware that this process would change on foot of the NBP. We consider ComReg's current methodological framework for assessing claims for USO funding to be sufficiently robust. While the requirements of the NBP may impact the future provision of USO ComReg, applying this framework, can as appropriate take into account any impact of NBP as well assess the relevance of factors such as the evolution of USO net costs and availability or otherwise of a Government subsidy (State aid) for the build out of a high capacity broadband access network.
- 84 The complex issue of transition from copper based networks to new enhanced networks is discussed at section 2.4.
- 85 With respect to the identification of contributing parties, it is conceivable that a winning bidder in the NBP tender could possibly be required to contribute to a universal service fund if established. In this respect, ComReg would highlight the following factors:

²⁸ As notified in ComReg information notices, ComReg documents 14/84, 14/93, 14/117, and 15/32.

²⁹ Decision on the Costing of universal service obligations: Principles and Methodologies, May 2011, <http://www.comreg.ie/fileupload/publications/ComReg1471.pdf>

- If at some point in the future ComReg should determine that a positive USO net cost is an unfair burden on a USP, the Universal Service Regulations³⁰ provides that ComReg: “*shall apportion the net cost of the universal service obligation among providers of electronic communications networks and services*” [emphasis added];
- ComReg has previously proposed³¹ that it would in principle be appropriate that all providers of electronic communications networks and services to which the Levy Order under Section 30 of the Communications Regulations Act 2002 applies should contribute to a USO fund (subject to any de minimis threshold or other exclusions);
- BEREC notes that: “[t]he categories of the contributors vary from one country to another, with the providers of publicly available telephone services being mentioned in almost all the answers.” [emphasis added].
- Furthermore, ComReg notes that in overseas jurisdictions where a fund has been established that revenues associated with VOIP have also been included.

2.3.5 Application of State Aid Guidelines

86 According to the one respondent (Imagine), the SAG Paragraph (45) states that “*Where an operator is subject to certain obligations to cover the target area (61), it may not be eligible for State aid, as the latter is unlikely to have an incentive effect.*” The respondent furthermore notes that the SAG, in the associated footnote (61) it gives the examples of:- a mobile operator with coverage targets under their licence conditions in the target area; an operator designated with USO receives public service compensation, no additional State aid can be granted to finance the same network. In this respect, the respondent raised queries about applying the SAG; whether the latter SAG conditions will apply to potential applicants to the NBP and whether ComReg could provide a list of operators in the Irish market to whom these conditions might apply.

ComReg’s response

87 ComReg is of the view that this is a matter for DCENR.

³⁰ In accordance with Regulation 12 (1) of the Regulations.

³¹ ComReg Document No.11/77: <http://www.comreg.ie/fileupload/publications/ComReg1177.pdf>

2.4 Transition from copper to fibre access networks

2.4.1 Dual operation of copper and fibre platforms

- 88 One respondent made a number of observations in relation to the operation in parallel of copper and fibre platforms.
- 89 Specifically Eircom in its response stated that *“An emerging hypothesis is that all or a majority of the services delivered under the NBP intervention will be based on fibre access technology. To ensure maximum value for the Government intervention, the provision of a future-proof solution will need to be provided as cost-effectively as possible. The current obligation on eircom as the USP is to not withdraw any service on its technology platform for a period of time approved by ComReg. If a long transition period is determined by ComReg the USO costs of maintaining a parallel network will extend over a longer period. Consequently it is in the interests of all stakeholders such as other operators who would have to contribute to the USO costs, and ultimately to end user customers who would fund these costs through their payments for service, that the parallel operation of both a copper and fibre network should be for as limited a period as practicable.”*

ComReg response

- 90 While Eircom sets out the hypothesis that the winning bid will be largely based on FTTH (fibre-to-the-home), ComReg at this time does not know how the winning bid or bids will be constructed, what technologies will be used and to what extent exiting copper will be recycled as part of the solution (for example, as part of a FTTC approach). However, for the purposes of addressing the question raised, we assume the hypothesis that some form of new infrastructure will be deployed as part of the winning bid and that this would be rolled out in parallel with the existing copper based network.
- 91 The discussion below is concerned solely with the NBP intervention area. It is envisaged that the likely issues to be addressed outside the intervention area will be quite different given, for example, the prevalence of FTTC (fibre-to-the-cabinet) deployment and the prevalence of Local Loop Unbundling. We are not aware of any move to propose the withdrawal of copper outside the NBP intervention area at this time and accordingly do not comment on this matter.

- 92 Our consent will be required if Eircom is to be allowed to phase out its copper network. Eircom has an obligation in several regulated markets not to withdraw access to services and facilities already granted (as well as obligations as part of its current USO designation). In the context of SMP obligations (in particular ComReg documents 08/104³² and 10/39³³) a notice period of five years was proposed in the context of exchanges which had been unbundled. We note that there are likely to be few, if any, unbundled exchanges in the NBP intervention area and accordingly, many of the considerations set out in this document may need to be revisited in an NBP.
- 93 ComReg is of the view that it may be economically inefficient to insist on the maintenance of separate parallel copper infrastructure — where alternative infrastructure has been deployed under the NBP. Consequently we would be unlikely to insist on the maintenance of the existing copper infrastructure indefinitely if certain conditions to be decided through consultation are met. Issues that may need to be considered could include:
- The timing, geographic extent and technical details of the proposed migration and how the timing of any withdrawal would coincide with the roll out of the new infrastructure
 - How any USO obligations would be fulfilled over the new network
 - How end users rights would be respected in particular with regard to retail contracts and continuity of service. We would also need to understand how end users who have no demand for the services provided by the new infrastructure and who do not voluntarily migrate would be treated.
 - Whether the wholesale product set available on the new network would be adequate to replace legacy wholesale products.
 - What notification periods would be provided to wholesale operators using the network
 - Ensuring that adequate migration paths from old to new wholesale products are in place in good time.
- 94 This list is not intended to be exhaustive. We will consult separately in more detail on these matters shortly.

³² <http://www.comreg.ie/fileupload/publications/ComReg08104.pdf>

³³ <http://www.comreg.ie/fileupload/publications/ComReg1039.pdf>

2.5 Radio Spectrum Issues

2.5.1 Summary of responses

95 Sixteen (16) of the twenty three (23) respondents to ComReg 14/126 made submissions on radio spectrum related matters. Twelve (12) of these respondents were from the Wireless Internet Service Providers (**WISPs**)³⁴ community.

96 At a high level the respondents sought clarity on:

- ComReg's plans for the release of radio spectrum that could be used for the provision of wireless broadband and in particular the 3.6 GHz band, and the timing of these plans;
- how ComReg's radio spectrum release plans would be co-ordinated with the NBP;
- specific details of ComReg's release plans for radio spectrum, in particular for the 3.6 GHz band, (e.g. ComReg's objectives, radio spectrum band, the licence conditions etc.); and
- other matters.

Clarity on ComReg's plans for the release of spectrum, in particular the 3.6 GHz band, and the timing of these plans

97 Fifteen (15) of the respondents clarity on ComReg's plans for the release and assignment of radio spectrum that could be used for the provision of wireless broadband services.

98 The majority of these respondents requested clarity on the 3.6 GHz band, while one of these respondents also sought clarity on the 2.6 GHz and 700 MHz bands.

99 The respondents requested clarity on what form any radio spectrum assignment process would. In particular:

- three respondents queried whether ComReg would reserve spectrum for the NBP winner and whether key aspects of the spectrum conditions (e.g. duration) would be co-ordinated with the NBP;

³⁴ WISPs are service providers who provide wireless broadband services using radio spectrum. As of Q4 2014, ComReg reported that there are 48,486 fixed wireless broadband subscriptions (Source: ComReg 15/27). These wireless broadband services are provided using licensed (e.g. 3.6 GHz, 10.5 GHz) or licensed-exempt (e.g. 2.4 GHz, 5.8 GHz) radio spectrum. In relation to the 3.6 GHz band, figures provided by operators as part of their reporting obligations to ComReg suggest that there are approximately 28,000 wireless broadband subscribers being served using the 3.6 GHz band

- two respondents queried whether the existing licences in the 3.6 GHz band might be renewed or extended beyond 31 July 2017. One of these respondents also queried whether there would be any reasons why ComReg would not take a similar approach to that of Ofcom in the UK and extend the existing licences indefinitely for the 3.6 GHz band; and
- other respondents sought specific details of any future award process that ComReg may hold. These queries are summarised below.

100 The respondents requested that this clarity be provided in a timely manner as, among other things, it was claimed that this would allow interested parties to:

- engage fully with the NBP project, both in relation to the provision of proposals and business plans for the NBP's Next Generation Access (**NGA**) mapping process and the participation in any future NBP tender; and
- make plans and take investment decisions in relation to the 3.6 GHz radio spectrum band (where licences expire on 31 July 2017) and other radio spectrum bands that could be used for the provision of Fixed Wireless Access (**FWA**) services.

Co-ordination of spectrum plans with the NBP process

101 In relation to the NBP, a number of the respondents suggested that, absent timely clarity on the future use of the radio spectrum, the wireless industry would, in their opinion, be at a disadvantage compared to other NGA platforms and could be forced out of the NBP process unfairly.

102 One of these respondents queried the regulatory implications and the actions that ComReg would take *“to prevent market distortion in the scenario where regulatory clarity on the 3.6 GHz spectrum is not provided in a timely manner to facilitate participation by FWA operators in the NBP process and subsequently operators using TD LTE FWA deploy commercial NGA services in areas designated for State intervention.”*

103 In addition this respondent queried:

- how ComReg would *“respond to the unintended consequence of the current consultation process³⁵ which jeopardises the significant planned investment by Imagine and possibly other FWA operators into key target NBP areas not planned to be covered commercially by other fixed operators”*; and
- *“how the existing operators will be given assurances to facilitate investment within the NBP timeframe and participate in the NBP process.”*

³⁵ While it is not entirely clear what consultation process is being referred (e.g. a NBP consultation process or ComReg consultation process, ComReg assumes that this respondent is referring to ComReg consultation 14/101.

Specific aspects of a spectrum award, in particular an award for the 3.6 GHz band.

104 This section summarises the requests for clarity on the specific details on any future award of radio spectrum for wireless broadband (e.g. ComReg's objectives, radio spectrum band, the licence conditions etc.). Where the respondents have identified a specific band (e.g. the 3.6 GHz band) this is identified. If no band is identified, this respondent referred to radio spectrum for wireless broadband in general, which includes the 3.6 GHz band and other spectrum bands.

ComReg's objectives for a spectrum award

105 Considering the existing FWA services, the upcoming expiry of the licences in the 3.6 GHz band and the NBP project, a number of respondents requested clarity on how ComReg would consider specific objectives in an award process and in particular an award of the 3.6 GHz band. The specific queries were related to how ComReg would:

- *“intend to ensure that the important role of FWA in the NBP is reflected in its spectrum award proposals, proposals, particularly with regard to which spectrum, and what quantum thereof, is appropriate to include in the award?”*,
- *“enable these valuable home-grown Irish businesses [namely the WISPs] providing their services to the said 170,000 customers to continue in business”*;
- not cut-off an opportunity for FWA investment including NGA grade LTE-A deployment in NBP areas;
- facilitate the participation of FWA in the NBP process and subsequent deployment in NBP areas; and
- promote and ensure sufficient competition for broadband and NGA service, particularly in encouraging FWA to compete in areas poorly served by broadband access;

The prioritisation of the 3.6 GHz band

106 As discussed above, the majority of the respondents focussed on the 3.6 GHz band and, in general, queries were received on whether:

- the 3.6 GHz band should be excluded from the multiband spectrum award proposed by ComReg in Document 14/101, in order to provide certainty and continuity of access for what some respondents considered to be the only feasible use; and

- decisions on the 3.6 GHz band could be prioritised and accelerated in order to provide clarity on the availability of this band post 2017.

How much spectrum to release?

107 Five respondents queried whether ComReg would release sufficient radio spectrum to meet the requirement of the NBP process in relation to the 30 Mbps preliminary download requirement. In particular:

- two respondents queried whether additional radio spectrum would be released to allow for expansion and the predicted up-scaling of the NBP minimum requirements; and
- one respondent suggested that the channel sizes must be “20 MHz+”.

Alignment of licence conditions with NBP process

108 Four respondents requested clarity on whether any licence conditions would be specifically aligned with the contract conditions of the NBP process.

109 One of these respondents queried whether ComReg had considered “*what certainty of access to spectrum*” was necessary for the NBP contract duration. Another respondent queried whether the “*spectrum assignment process and cost of spectrum*” would take account of the NBP process.

The spectrum fees

110 Five respondents requested clarity on whether the radio spectrum fees would be set at a reasonable level to create an environment whereby the WISPs could deliver NGA services.

111 Another respondent submitted that radio spectrum fees for FWA licensed radio frequency should be at a small cost relative to income for FWA operators.³⁶

The geographic area of the spectrum licences

112 Three respondents requested clarity on the likely geographic areas associated with a radio spectrum release, including:

- Two respondents requesting clarity on whether the 3.6 GHz band would be made available on a regional basis; and

³⁶ It added that it believed that if radio spectrum is sold to the highest bidder then this would also be in breach of the TFEU right to establishment of a company, as broadband FWA operators could not compete with the large telecoms companies and could not buy available radio spectrum to continue to provide broadband services in rural areas which they currently serve.

- The other respondent querying whether the radio spectrum licences would be split between NBP area and non-NBP areas.

Other licence conditions (licence duration, technology neutrality)

113 One respondent submitted that a licence duration of twenty years was necessary in order to provide certainty for investors to take a commercial risk. It added that a shorter licence duration of circa 8 to 10 years was of little use.

114 Another respondent requested clarity on:

- whether the radio spectrum award would be technology neutral save for the mode of operation FDD or TDD; and
- the “*policing scheme*” that ComReg would employ to ensure that the radio spectrum is used for the delivery of NGA.

Other matters

Fees for Fixed Radio links

115 One respondent submitted that the costs associated with Fixed Radio Links are a very significant part of the site costs and a disincentive to investing in carrier-grade equipment. It believed that this issue needed to be considered in light of the challenge of upgrading networks to provide a NBP type service.

Mobile Broadband (MBB) and FBB in different markets

116 One respondent submitted that MBB and high speed fixed wireless access broadband are, in its view, in distinct markets and it queried whether ComReg’s deliberations on this matter should consider whether there is sufficient radio spectrum allocated and assigned for use by fixed services exclusively. In addition, it queried whether there is any “*justifiable requirement*” or need for allowing MBB assignments in the 3.6GHz band.

Modification of the existing Liberalised Use Licences to introduce a geographic coverage condition.

117 One respondent queried whether ComReg would be introducing specific geographic coverage conditions to existing Liberalised-Use Licences in the NBP intervention areas.

2.5.2 ComReg's response

Clarity on the 3.6 GHz band

118 ComReg notes that the majority of the queries submitted relate to the 3.6 GHz band and sought further clarity on ComReg's plans and timelines for the release and assignment of right of use in this radio spectrum band.

119 As outlined in Document 15/14³⁷, and based on the responses it received to Document 14/101, ComReg is currently considering the possible release of this band in a separate award process. ComReg notes that the submissions to this consultation also support the consideration of the 3.6 GHz band in a separate award process.

120 ComReg expects to issue a consultation in this regard during the summer of 2015, and this consultation will take into account all relevant information, including the radio spectrum related submissions to this call for inputs as summarised above.

121 With regard to the overall timeframes that are likely to be associated with this consultation process, ComReg observes that it is not possible to provide definitive information at this point because these timeframes will be driven by, among other things, the responses it receives to any consultations issued.³⁸

122 That being said, ComReg remains conscious of the expiry of existing 3.6 GHz licences in July 2017 and the request that clarity on the future of the 3.6 GHz band be provided as far as possible in advance of this date. Accordingly, it is ComReg's current intention, noting the points made above, to issue its response to the 3.6 GHz consultation and further information on next steps by end of year.

Clarity on other spectrum bands

123 While the focus of the radio spectrum queries was placed firmly on the 3.6 GHz band, more general queries on radio spectrum for wireless broadband, including the 700 MHz and 2.6 GHz bands, were also submitted. Further clarity on ComReg's radio spectrum plans for these bands is likely to be provided within the coming months via various ComReg documents, including:

- the forthcoming consultation on the 3.6 GHz band which, as outlined above, is expected to issue this summer;

³⁷ ComReg Information Notice (15/14) "*Spectrum award - 2.6 GHz band with possible inclusion of 700 MHz, 1.4, 2.3 and 3.6 GHz bands (ComReg Document 14/101)*", 16 February 2015

<http://www.comreg.ie/fileupload/publications/ComReg1514.pdf>

³⁸ ComReg is required to conduct a full public consultation in respect of the future of the 3.6 GHz band and, in doing so, has strict legal obligations to be open, transparent, fair and non-discriminatory with respect to all interested parties (and not just with industry or particular sectors of industry). ComReg also cannot predict the nature and extent of the responses it will receive to its consultations and what further steps might then be required based on those responses.

- the outcome of the 700 MHz Cost Benefit Analysis (**CBA**) which is also expected to issue in Q2/2015; and
- the Radio Spectrum Management Strategy consultation which is expected to issue following the above publications.

Co-ordination of spectrum plans with the NBP process

124 ComReg notes that a number of respondents, while commenting on the NBP process, claimed that absent timely clarity on radio spectrum (and the 3.6 GHz band in particular) the wireless industry would be at a disadvantage compared to other NGA platforms and therefore could, in their view, be unfairly forced out of the NBP process.

125 To be clear, and as stated earlier in this document, ComReg has no decision-making role in the design of the NBP (including decisions on the mapping or tendering process) or the award of any contracts under the NBP. As such, these NBP decision-making matters are outside of ComReg's remit. The decision-making with respect to these matters is the responsibility of the DCENR and the Minister. ComReg has directed the relevant comments and queries towards DCENR for its consideration.

126 As discussed above, ComReg is currently considering the possible release of the 3.6 GHz band in a separate award process and ComReg expects to issue a consultation during the summer of 2015. While ComReg cannot provide further clarity on the overall timelines at this point in time, ComReg would reiterate that it remains conscious of the expiry of existing 3.6 GHz licences in July 2017 and is working towards providing clarity on the future of the 3.6 GHz band as far as possible in advance of this date.

Other matters

Fees for Fixed Radio links

127 The fees for licensed fixed radio links in Ireland vary from €100 p.a. to €1800 p.a. depending on the frequency, bandwidth and location of the radio link.³⁹ These fees are likely to be relatively small compared to other site costs (e.g. site rental, power etc.).

³⁹ The radio link fees are set out in the Wireless Telegraphy (Radio Link licence) Regulations, 2009 (S.I. no. 370 of 2009),

128 Compared to many other countries in Europe, Ireland has a higher deployment of fixed radio links per capita, and each year the number of radio links deployed is increasing.⁴⁰ This appears to be driven by a combination of factors, such as a lack of suitable alternative backhaul platforms (e.g. fibre) at a reasonable cost, and the benefits of deploying of radio links (e.g. relatively quick deployment, flexibility, reasonable costs etc.).

129 Overall, this would suggest that radio spectrum fees for radio links are not set at an unreasonable level, although ComReg notes that the fees for radio links were set in 2009, and do not include a CPI component, unlike other spectrum fees.

Mobile Broadband (MBB) and FBB in different markets

130 While this point will be further considered by ComReg in its consultation on the 3.6 GHz band, ComReg observes, at this stage, that the EC Decision the 3.6 GHz band⁴¹ is technology- and service neutral and does not specify that the band be reserved for one particular type of service (e.g. fixed or mobile).

Modification of the existing Liberalised Use Licences to introduce a geographic coverage condition.

131 Following the Multi-band Spectrum Award (**MBSA**), Liberalised Use Licences were issued to the four winning bidders.⁴² These licences have a commencement date of 1 February 2013 and oblige the licensees to cover 70% of the population with a mobile signal (via 2G, 3G, 4G or a combination of these technologies) within three years.

132 While ComReg has yet to carry out its assessment of compliance with this coverage obligation (because the obligation does not fall due until after 1 February 2016), it observes that current coverage levels claimed by the licensees would be in excess of this 70% population obligation. For example:

- Vodafone claims 99% coverage for calls and text⁴³, and 90% 4G coverage⁴⁴;
- Three claims 99.5% population coverage for voice and text and 97% for mobile broadband⁴⁵; and

⁴⁰ On 30 June 2014, there were 12,151 fixed radio link licences in Ireland. In addition, tens to hundreds of radio links are also deployed using the four national point to point block licences in the 26 GHz band.

⁴¹ Commission Implementing Decision 2014/276/EU amending the Decision 2008/411/EC on the harmonisation of the 3400-3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community

⁴² These were Vodafone, Telefonica, Hutchison 3G Ireland, and Meteor.

⁴³ <http://www.vodafone.ie/network/> (27 April 2015)

⁴⁴ <http://www.vodafone.ie/aboutus/media/press/show/BAU025136.shtml> (26 March 2015)

⁴⁵ <http://www.three.ie/press/fact-sheet/> (27 April 2015)

- Meteor claims to provide extensive voice, text, and 3G data coverage and with 4G coverage now being available.⁴⁶

133 In light of the above and noting that no reasoning or justification was provided by the respondent in support of its suggestion, ComReg does not consider that a robust case has been made out by this respondent.

⁴⁶ <https://www.meteor.ie/internet-coverage/> (27 April 2015)

3 Next steps

134 In order to promote further openness and transparency ComReg, having reviewed the DCENR's impending consultation, may publish an update to this response to call for input document where we consider that there are updates to any of our responses in light of the DCENR's consultation.

135 We also intend to publish a consultation, in the second half of 2015, to consider the dual operation of copper and fibre platforms as well as a potential transition from copper to fibre access networks.

136 As previously noted in section 2.3, in July 2015, we will publish our USO consultation.